The text is already in a natural format. Here is the structured content based on the natural text:

EDUCATION (ED)

ED F099 Practicum in Education
1-3 Credits
Individually arranged work experience. Credit is variable from 1 to 3 credits, depending upon the quality and quantity of the work experience. Credit may be earned in most disciplines and programs.
Lecture + Lab + Other: 0 + 0 + 0

ED F100 Language, Education, Linguistics (h)
3 Credits
Offered Spring
Introduction to the field of linguistics as it pertains to the field of education. Includes discussions of language structure, acquisition and bilingualism, and variation and public policy. The course does not satisfy requirements for the B.A. in Linguistics.
Cross-listed with LING F100.
Lecture + Lab + Other: 3 + 0 + 0

ED F110 Becoming a Teacher in the 21st Century (a)
1 Credit
Introduction to the B.A. in Elementary Education degree along with the resources available through the UA School of Education. Overview of what it means to be an elementary teacher in Alaska's culturally, linguistically and geographically diverse schools through review of current educational context and various entities that shape educational policy and familiarization with UAF/AK Teacher Standards and assessment. Participation in an elementary classroom is required.
Prerequisites: ED F110; WRTG F111X; sophomore standing.
Lecture + Lab + Other: 1 + 0 + 0

ED F201 Introduction to Education (a)
3 Credits
Introduction to the profession of education and specifically, the field of teaching. Review of social, political, cultural and historical factors that influence education and schools at the national and Alaska state level.
Field experience required.
Prerequisites: ED F110; WRTG F111X; sophomore standing.
Lecture + Lab + Other: 3 + 0 + 0

ED F204 Literature for Children
3 Credits
Examination of effective uses of literature to promote learning. Critical analysis of authors, illustrators and content of children's literature representative of multiple genres and diverse peoples and perspectives including Alaska literature. Review of criteria for book selection and application of review process to books selected by students based on professional recommendations and reviews. Field experience required.
Prerequisites: ED F201.
Lecture + Lab + Other: 3 + 0 + 0

ED F237A Technology Tools for Teachers: Collaborate/Hangouts
0.5 Credit
Designed to equip pre-service teachers with the necessary technology skills to be successful in their pre-service programs. Successful challenge or completion of all modules is a prerequisite for ED F239. May be repeated once for credit. Each module will require approximately six hours of direct instruction and four to eight hours of lab work. This module covers the use of Blackboard Collaborate and Google Hangouts for participating in UA course work online.
Lecture + Lab + Other: 0.5 + 2 + 0

ED F237B Technology Tools for Teachers: Blackboard
0.5 Credit
Designed to equip pre-service teachers with the necessary technology skills to be successful in their pre-service programs. Successful challenge or completion of all modules is a prerequisite for ED F239. May be repeated once for credit. Each module will require approximately six hours of direct instruction and four to eight hours of lab work. This module covers the use of calendar and discussion board, submitting assignments, and checking grades.
Lecture + Lab + Other: 0.5 + 2 + 0

ED F237C Technology Tools for Teachers: Google Drive
0.5 Credit
Designed to equip pre-service teachers with the necessary technology skills to be successful in their pre-service programs. Successful challenge or completion of all modules is a prerequisite for ED F239. May be repeated once for credit. Each module will require approximately six hours of direct instruction and four to eight hours of lab work. This module covers the use of Google Drives (Google Apps) for word processing, creating presentation, working with spreadsheets/charting, converting documents to Office format, and sharing of documents.
Lecture + Lab + Other: 0.5 + 2 + 0

ED F237D Technology Tools for Teachers: Office
0.5 Credit
Designed to equip pre-service teachers with the necessary technology skills to be successful in their pre-service programs. Successful challenge or completion of all modules is a prerequisite for ED F239. May be repeated once for credit. Each module will require approximately six hours of direct instruction and four to eight hours of lab work. This module covers the basic uses of Microsoft Office (Word, PowerPoint, Excel) for productivity tasks.
Prerequisite: Access to MS Office is required.
Lecture + Lab + Other: 0.5 + 2 + 0

ED F237E Technology Tools for Teachers: Office Suite
0.5 Credit
Designed to equip pre-service teachers with the necessary technology skills to be successful in their pre-service programs. Successful challenge or completion of all modules is a prerequisite for ED F239. May be repeated once for credit. Each module will require approximately six hours of direct instruction and four to eight hours of lab work. This module covers the basic uses of Microsoft Office (Word, PowerPoint, Excel) for productivity tasks.
Prerequisite: Access to MS Office is required.
Lecture + Lab + Other: 0.5 + 2 + 0

ED F245 Child Development (s)
3 Credits
A study of the physical, cultural, emotional, cognitive and social aspects of a child's development from prenatal period through early adolescence. Focus on developmental theories including Erickson, Gardner, Gilligan, Kagen, Sternberg, Vygotsky and other contemporary theories of child and adolescent development.
Prerequisites: WRTG F111X.
Cross-listed with PSY F245.
Lecture + Lab + Other: 3 + 0 + 0

ED F299 Practicum in Education
1-3 Credits
Lecture + Lab + Other: 0 + 0 + 0

ED F303 Language Acquisition (O, W)
3 Credits
Theories of the acquisition and development of first and second languages, including consideration of biological and sociocultural factors. Survey of traditional and contemporary theories, and implications for pedagogy and public policy.
Prerequisites: COJO F131X or COJO F141X; WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X.
Recommended: LING F101X.
Cross-listed with LING F303.
Lecture + Lab + Other: 3 + 0 + 0
ED F309  Elementary School Music Methods  
3 Credits  
Offered Fall Even-numbered Years  
Principles, procedures and materials for teaching music to children at the elementary level.  
Cross-listed with MUED F309.  
Lecture + Lab + Other: 3 + 0 + 0

ED F329  Teaching with Technology  
3 Credits  
Participants will examine multiple technology-based strategies that promote learning in P-12 classrooms. The class will examine mobile as well as desktop/laptop technologies, exploring a variety of topics including: collaboration, communication, content and classroom management apps, the role of social media in school, and the ISTE Standards for Educators.  
Prerequisites: Approval from School of Education academic advisor, laptop or iPad required.  
Lecture + Lab + Other: 3 + 0 + 0

ED F330  Assessment of Learning  
3 Credits  
Review and examination of the range of traditional and alternative assessment and evaluation approaches used in educational contexts. Focus is on developing assessment practices and policies that are appropriate for the diverse student population in Alaska's rural and urban schools. Field experience required.  
Prerequisites: ED F201; a mathematics baccalaureate core course.  
Lecture + Lab + Other: 3 + 0 + 0

ED F344  Foundations of Literacy Development  
3 Credits  
Language, reading, and writing development examined in children of varying ages and within a range of social and cultural contexts, with emphasis on a developmental approach to literacy development in school and home settings. Introduction to best practices in research-based methods for teaching and learning of reading and writing. Field experience required.  
Prerequisites: ED F201; ED F204; WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X; upper-division standing; laptop computer required.  
Lecture + Lab + Other: 3 + 0 + 0

ED F345  Sociology of Education  
3 Credits  
Offered Fall Odd-numbered Years  
Theoretical perspectives on various dimensions of the relationship between education and society, including the institutional context of schooling, the impact of schooling on social stratification, and social organization within the school and classroom. Special attention is given to issues of equity and contemporary educational reform efforts.  
Prerequisites: SOC F101X.  
Cross-listed with SOC F345.  
Lecture + Lab + Other: 3 + 0 + 0

ED F350  Communication in Cross-cultural Classrooms  
3 Credits  
Interdisciplinary examination of communication and language in cross-cultural educational contexts, including language, literacy and interethnic communication related to classrooms in Alaska.  
Prerequisites: ED F201.  
Lecture + Lab + Other: 3 + 0 + 0

ED F411  Reading, Writing, Language Arts: Methods and Curriculum Development  
3 Credits  
Offered Fall  
Study and application in the classroom of best practices from research-based strategies for the teaching and learning of reading, writing and language arts concepts. Includes content and methods for students in elementary classrooms with diverse populations. Requires development and classroom implementation of integrated reading and writing unit. Concurrent internship required.  
Prerequisites: Admission to Internship Year.  
Lecture + Lab + Other: 2.5 + 0 + 1.5

ED F412  Integrated Social Studies and Language Arts: Methods and Curriculum Development  
3 Credits  
Offered Fall  
Study and application in the classroom of best practices from research-based strategies for the teaching and learning of social studies concepts, content, and methods integrated with language arts for students in elementary classrooms with diverse populations. Requires development and classroom implementation of integrated social studies and language arts unit. Concurrent internship required.  
Prerequisites: WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X; admission to Internship Year.  
Lecture + Lab + Other: 2 + 0 + 3

ED F414  Art, Music and Drama in Elementary Classrooms  
3 Credits  
Offered Spring  
Exploration and application, in the classroom, of theory, practice, methods and materials used in teaching in and through visual art, music and drama. Concurrent internship required.  
Prerequisites: Admission to the Internship Year.  
Lecture + Lab + Other: 1.5 + 0 + 4.5

ED F417  Physical and Health Education for Elementary Teachers  
3 Credits  
Offered Fall  
Introduction and application of the relationship between physical fitness and good health in a school setting. Includes introducing students to fundamental movement activities and games. Includes incorporating health curriculum and first aid procedures into practices and policies, and issues specific to the Alaska context. Concurrent internship required.  
Prerequisites: Admission to the Internship Year.  
Lecture + Lab + Other: 1.5 + 0 + 4.5

ED F419  Cultural Atlases as a Pedagogical Strategy  
3 Credits  
The content of the course provides an in-depth look at how teachers can integrate technology and academics with oral traditions and offers a vehicle for helping communities define themselves and their unique cultural identity. Teachers will have an opportunity to guide their students through a positive collaboration with local culture-bearers, community members and educational personnel. The multimedia resources for this course provide numerous examples of cultural atlases and guidance on ways in which the rich oral traditions of Native people can be drawn upon in support of the school curriculum.  
Prerequisites: ANTH F242.  
Cross-listed with CCS F418.  
Stacked with CCS F618, ED F619.  
Lecture + Lab + Other: 3 + 0 + 0
ED F420   Alaska Native Education   (s, a)  
3 Credits  
Offered Fall  
School systems historically serving Native people, current efforts toward  
local control and the cross-cultural nature of this education. Field  
experience required.  
Prerequisites: ANTH F242 and Junior standing.  
Cross-listed with ANS F420.  
Stacked with ED F606.  
Lecture + Lab + Other: 3 + 0 + 0  

ED F431   Web 2.0 Fundamentals: Participate, Produce, Publish  
3 Credits  
Offered Fall As Demand Warrants  
Examine the impact of Web 2.0, cloud computing and mobile  
technologies on K-12 education and other social institutions. Establish  
and publish to frameworks--web-based e-portfolio, personal learning  
network, blog, podcasts--that will form the core elements of the M.Ed.  
Instructional Technology Innovation (MITI). This course is a prerequisite  
for subsequent work toward the MITI and should be taken before or  
concurrently with ED F432, Fundamentals of Media Design.  
Prerequisites: Admission to the Master of Education program.  
Lecture + Lab + Other: 3 + 0 + 0  

ED F432   Fundamentals of Media Design  
3 Credits  
Offered As Demand Warrants  
Create and publish materials with proper media design for use in teaching  
and learning. Topics include photo and graphics formatting, video  
production, video podcast production, SMART technologies, static  
screen capture and motion screen capture. These productions will be  
included on students’ MITI e-portfolios. This course is a prerequisite for  
isubsequent MITI courses and should be taken after or concurrently with  
ED F431 Web 2.0 Fundamentals: Participate, Produce, Publish.  
Prerequisites: Admission to the Master of Education program.  
Lecture + Lab + Other: 3 + 0 + 0  

ED F440   Gender and Education   (s)  
3 Credits  
Educational practices and processes and their relation to the changing  
situation of women in society. Examination of schools as sites of  
pervasive gender socialization and discrimination as well as offering new  
opportunities for liberation. Topics include social construction of gender,  
patterns of access and achievements, gender as an organizing principle  
in schools and classrooms, and feminist agendas and strategies for  
change.  
Prerequisites: Junior standing.  
Cross-listed with WGS F440.  
Stacked with ED F640.  
Lecture + Lab + Other: 3 + 0 + 0  

ED F449   Elementary Art Methods  
3 Credits  
Offered Spring  
Methodologies of instruction and assessment in art education at the  
elementary level. Focus is on the knowledge and tools necessary to  
become excellent elementary art educators. Students will be expected to  
construct lessons reflecting theory and practice that are developmentally  
appropriate for elementary level students of all ages. Particular attention  
will be given to using and understanding the National Standards for Art  
Education, Alaska Content/Performance Standards and key curriculum  
documents in an elementary context.  
Prerequisites: Admission to K-12 Art post-baccalaureate licensure program or to M Ed in Curriculum and Instruction option for post-  
baccalaureate students.  
Stacked with ED F649.  
Lecture + Lab + Other: 3 + 0 + 0  

ED F452   Elementary Internship   (O)  
3-15 Credits  
Supervised teaching in both elementary and secondary schools approved by the School of  
Education. Students should expect to be involved in the school setting for some or all of the school day (depending on number of credits  
taken) for the entire university semester. The School of Education may  
limit enrollment, determine assignments and cancel the registration of students doing unsatisfactory work. Post-baccalaureate students must  
be admitted to the Art K-12 licensure program. Passing Praxis I scores.  
Prerequisites: COJO F131X or COJO F141X; successful completion of  
methods practicum and methods course work with a C or better.  
Cross-listed with ART F458.  
Lecture + Lab + Other: 1 + 0 + 42  

ED F453   Secondary Internship   (O)  
3-15 Credits  
Supervised teaching in secondary schools approved by the School of  
Education. Students should expect to be involved in the school setting for some or all of the school day (depending on number of credits  
taken) for the entire university semester. The School of Education may  
limit enrollment, determine assignments and cancel the registration of students doing unsatisfactory work. Post-baccalaureate students must  
be admitted to K-12 Art licensure program. Passing Praxis I scores.  
Prerequisites: COJO F131X or COJO F141X; successful completion of  
methods practicum and methods course work with a C or better.  
Cross-listed with ART F459.  
Lecture + Lab + Other: 1 + 0 + 42  

ED F454   Student Teaching K-12   (O)  
15 Credits  
Supervised teaching in both elementary and secondary schools approved by the Music Department and the School of Education. Open only to  
Music majors seeking K-12 certification. Students should expect to be  
involved in the school setting for the entire school day for the entire  
university semester. The department may limit enrollment, determine  
assignments and cancel the registration of students doing unsatisfactory  
work. Passing Praxis scores. For Bachelor of Music students, see B.M.  
degree requirements.  
Prerequisites: COJO F131X or COJO F141X; successful completion of  
methods practicum and methods course work with a C or better.  
Lecture + Lab + Other: 1 + 0 + 42
ED F456 Orientation to Teaching in Rural Alaska (a) 3 Credits
Offered Summer, As Demand Warrants
Needs of rural schools, their environments and the recipients of school services with special attention given to cross-cultural educational issues. 
Prerequisites: Permission of instructor. 
Lecture + Lab + Other: 2 + 3 + 0

ED F461 Native Ways of Knowing (h, a) 3 Credits
Offered As Demand Warrants
Focus on how culture and worldview shape who we are and influence the way we come to know the world around us. Emphasis on Alaska Native knowledge systems and ways of knowing. 
Prerequisites: Junior standing. 
Cross-listed with ANS F461. 
Lecture + Lab + Other: 3 + 0 + 0

ED F466 Internship and Collaborative Student Teaching 3 Credits
Offered Fall
Supervised internship for students in the first half of a year-long professional internship in elementary teacher education. Includes immersion in planning and teaching. Course work is integrated into the internship experience. Interns are assessed in relationship to UAF/Alaska state and national standards. 
Prerequisites: Admission to Internship Year. 
Lecture + Lab + Other: 1.5 + 0 + 12

ED F467 Classroom Management Communication and Collaboration I 2 Credits
Offered Fall
For student interns participating in the first half of the professional internship year. Focus of course is UAF/Alaska Teacher Standards 6 (Classroom Management and Organization), Standard 7 (Partnerships with Parents, Families and Community) and Standard 8 (Professionalism and Collaboration). Interns complete and reflect on collaborative experiences and activities both within and outside their school and improve classroom communication skills through collection and analysis of selected artifacts to document and provide evidence of professional development and achievement relative to UAF/Alaska Teacher Standards. Concurrent internship required. 
Prerequisites: Admission to Internship Year. 
Lecture + Lab + Other: 1 + 0 + 8

ED F468 Internship and Student Teaching (O) 4 Credits
Offered Spring
For student interns participating in the second half of the year-long professional elementary teacher education internship. Interns must spend at least four days per week in the classroom, one month full-time in the classroom including at least three weeks of full responsibility for the classroom. Builds on ED F466 requirements with continued assessment based on UAF/Alaska State and National Standards. 
Prerequisites: COJO F131X or COJO F141X, admission to the Internship Year. 
Lecture + Lab + Other: 2 + 0 + 6

ED F469 Classroom Management Communication and Collaboration II 2 Credits
Offered Spring
For student interns participating in the second half of the professional internship year. Interns use the UAF/Alaska Teacher Standards 1 (Philosophy), 5 and 6 (planning components), 7 (Families and Community) and 8 (Professionalism) as a basis for examining field- and course-based experiences and activities during the internship year. Requires collection and analysis of selected artifacts to document and provide evidence of professional development and achievement relative to UAF/Alaska educational standards. Interns formally present completed portfolios for reviews and evaluations. Concurrent internship required. 
Prerequisites: Admission to 2nd semester of the Internship Year. 
Lecture + Lab + Other: 1 + 0 + 3

ED F476 Assessment of Literacy Development 1 Credit
Offered Spring
Interns will review, evaluate and create assessments to document elementary student literacy development. Interns will analyze results of literacy assessments and develop plans for instruction for each elementary student. Assessments may include teacher-made quizzes or tests, anecdotal records based on observing children, student reading and writing samples, and spelling assessments. Interns will identify important characteristics of each student including, but not limited to, student interests and goals for literacy development. 
Prerequisites: Admission to the internship year. 
Lecture + Lab + Other: 1 + 0 + 22

ED F478 Mathematics Methods and Curriculum Development 3 Credits
Offered Fall
Study and application in the classroom of best practices from research-based strategies for the teaching and learning of mathematical concepts, content and methods for students in elementary classrooms with diverse populations. Requires development and classroom implementation of mathematics unit. Concurrent internship required. 
Prerequisites: Admission to Internship Year. 
Stacked with ED F678. 
Lecture + Lab + Other: 2 + 0 + 8

ED F479 Science Methods and Curriculum Development 3 Credits
Offered Spring
Study and application in the classroom of the best practices from research-based strategies for the teaching and learning of science concepts, content and methods for students in elementary classrooms with diverse populations. Requires development and classroom implementation of science unit. Classroom internship required. 
Prerequisites: Admission to internship year; concurrent enrollment in other internship year courses; Alaska passing scores for three Praxis I exams. 
Stacked with ED F688. 
Lecture + Lab + Other: 2.5 + 0 + 4
ED F486  Media Literacy  (O, W, h)  
3 Credits  
Promotes critical thinking skills that empower people to make independent judgments and informed decisions in response to information conveyed through the channels of mass communications. Emphasis on developing students and others into critical viewers, listeners and readers of media.

Prerequisites: COJO F131X or COJO F141X; junior standing; laptop computer.

Lecture + Lab + Other: 3 + 0 + 0

ED F601  Introduction to Applied Social Science Research  
3 Credits  
Review of the most common educational research paradigms, data gathering techniques and analytical tools used in the study of human behavior and educational institutions. Attention will be given to collaborative research models, with a focus on the translation of research results into practical application.

Lecture + Lab + Other: 3 + 0 + 0

ED F603  Field Study Research Methods  
3 Credits  
Focus on techniques for conducting both quantitative and qualitative field research. Particular emphasis on considerations for conducting field research in cross-cultural settings.

Prerequisites: ED F601.

Cross-listed with CCS F603.

Lecture + Lab + Other: 3 + 0 + 0

ED F604  Documenting Indigenous Knowledge  (a)  
3 Credits  
Offered Fall  
A thorough grounding in research methodologies and issues associated with documenting and conveying the depth and breadth of indigenous knowledge systems and their epistemological structures. Includes a survey of oral and literate data-gathering techniques, a review of various modes of analysis and presentation, and a practical experience in a real-life setting.

Recommended: Graduate-level survey course in research methods.

Cross-listed with CCS F604.

Lecture + Lab + Other: 3 + 0 + 0

ED F606  Alaska Native Education  (a)  
3 Credits  
Offered Fall  
School systems historically serving Native people, current efforts toward local control and the cross-cultural nature of this education. Field experience required.

Prerequisite: ANTH F242 and graduate standing.

Stacked with ANS F420; ED F420.

Lecture + Lab + Other: 3 + 0 + 0

ED F608  Indigenous Knowledge Systems  
3 Credits  
Offered Fall  
A comparative survey and analysis of the epistemological properties, world views and modes of transmission associated with various indigenous knowledge systems. Emphasis on knowledge systems practiced in Alaska.

Prerequisites: Graduate standing.

Cross-listed with CCS F608; RD F608; ANL F608.

Lecture + Lab + Other: 3 + 0 + 0

ED F610  Education and Cultural Processes  
3 Credits  
Offered As Demand Warrants  
Advanced study of the function of education as a cultural process and its relation to other aspects of a cultural system. Students will be required to prepare a study in which they examine some aspect of education in a particular cultural context.

Cross-listed with CCS F610.

Lecture + Lab + Other: 3 + 0 + 0

ED F611  Culture, Cognition and Knowledge Acquisition  
3 Credits  
Offered Fall  
An examination of the relationship between learning, thinking and perception in multicultural contexts. Particular emphasis will be on the implications of these relationships for schooling. Content will focus on cultural influences on perception, conceptual processes, learning, memory and problem solving. Content will also reflect concern for practical teaching problems.

Recommended: ED F610.

Cross-listed with CCS F611.

Lecture + Lab + Other: 3 + 0 + 0

ED F612  Foundations of Education  
3 Credits  
Offered Fall  
Introduces a range of philosophical thought with emphasis on schooling in the cross-cultural context and on issues of social justice and quality in education. Students will explore the interplay between cultural processes and various philosophical positions adopted by educators in the design and practice of pedagogy, learn the history of public school education in the U.S. and Alaska and analyze the policies affecting public school education today.

Lecture + Lab + Other: 3 + 0 + 0

ED F613  Alaska Standards for Culturally Responsive Schools  (a)  
3 Credits  
Offered As Demand Warrants  
Guidelines, rationale and resources for adapting educational policies, programs and practices to better address the cultural well-being of the students and communities they serve. Content will be grounded in the Alaska Standards for Culturally Responsive Schools, including standards for students, teachers, curriculum, schools and communities.

Cross-listed with CCS F613.

Lecture + Lab + Other: 3 + 0 + 0

ED F616  Education and Socioeconomic Change  
3 Credits  
Offered As Demand Warrants  
An examination of social change processes, particularly in relation to the deliberate development of new institutions and resulting forms of new consciousness. Emphasis is placed on the role of education and schooling in this development dynamic.

Cross-listed with CCS F616.

Lecture + Lab + Other: 3 + 0 + 0
ED F619  Cultural Atlases as a Pedagogical Strategy  (a)
3 Credits
The content of the course provides an in-depth look at how teachers can integrate technology and academics with oral traditions and offers a vehicle for helping communities define themselves and their unique cultural identity. Teachers will have an opportunity to guide their students through a positive collaboration with local culture-bearers, community members and educational personnel. The multimedia resources for this course provide numerous examples of cultural atlases and guidance on ways in which the rich oral traditions of Native people can be drawn upon in support of the school curriculum.
Prerequisites: ANTH F242.
Cross-listed with CCS F619.
Stacked with CCS F619; ED F419.
Lecture + Lab + Other: 3 + 0 + 0

ED F620  Language, Literacy and Learning
3 Credits
Offered Spring
This course examines the relationship among language, culture and mind to understand literacy. Specific areas of emphasis include literacy theory, literacy acquisition, orality, critical literacy, multi-modal literacies, media literacy and future literacies. The goal is the understand literacy as a cultural and cognitive phenomenon that informs praxis. Fieldwork is required.
Lecture + Lab + Other: 3 + 0 + 1

ED F621  Cultural Aspects of Language Acquisition
3 Credits
An expanded view of the ways in which individuals become socialized into particular patterns of first and second language and literacy. The ongoing acquisition of both oral and written language(s) from early childhood through adult life. Topics will include: the cultural dimensions of language development; the relationship between communication and culture; bilingualism; and the role of language in the transmission of sociocultural knowledge.
Cross-listed with LING F621.
Lecture + Lab + Other: 3 + 0 + 0

ED F624  Foundations of Education in Alaska: From Segregation to Standards  (a)
3 Credits
Offered Summer As Demand Warrants
Review of major Alaska educational reform efforts as a means of understanding historical and current state, national and international policies and practices related to development of curriculum, pedagogy and assessment that respond to the needs and interests of culturally and linguistically diverse populations. Examination of Alaska Quality Schools Initiative reform effort with focus on use of Alaska Standards for Culturally Responsive Schools.
Prerequisites: Admission to Internship Year; a laptop computer.
Lecture + Lab + Other: 3 + 0 + 0

ED F625  Exceptional Learners and Child Development: Individual and Cultural Characteristics
3 Credits
Offered Summer As Demand Warrants
Foundation for understanding, identifying and teaching to developmental abilities of children and early adolescents. Human development examined in context of cognition, personality, social behavior, language and physical development with focus on understanding and using cross-cultural influences specific to Alaska. Emphasis on development of children with exceptional abilities. Design, develop and modify curriculum and instruction to developmentally and culturally appropriate approaches. Theory is applied to practice in practicum.
Prerequisites: Admission to Internship Year.
Lecture + Lab + Other: 3 + 0 + 0

ED F626  Teaching Reading, Writing and Language Arts
3 Credits
Offered Summer As Demand Warrants
Examination of the nature and process of reading and writing for elementary students and focus on process of developing a language arts program. Includes acquisition and role of language in this process. Examination and evaluation of materials and methods of teaching language arts, including those used in some Alaska districts. Examination and evaluation of children's literature. Practicum with application of language arts concepts.
Prerequisites: Admission to Internship Year.
Lecture + Lab + Other: 3 + 0 + 0

ED F630  Curriculum Development
3 Credits
Offered Fall
Study of curriculum foundation. Examines types of curricular frameworks, including traditional and indigenous models. Current influences of district, state, national and international curriculum models are discussed. Curriculum design practice connects standards, goals and learning experiences to guide student learning. Fieldwork is required.
Lecture + Lab + Other: 3 + 0 + 1

ED F631  Culture, Community and the Curriculum
3 Credits
Offered Fall
Salient issues involved with the development of effective programs of instruction in small schools, including foundational design, conceptual models, organizational strategies, technical skills, current issues and trends, and their implications and application to the environment of rural Alaska.
Cross-listed with CCS F631.
Lecture + Lab + Other: 3 + 0 + 0

ED F637  Designing Social Science Research Overview
2 Credits
Offered As Demand Warrants
Overview of designing social science research. Investigations into constructing and analyzing a variety of research designs and data collection methods for social science research. General procedures for conducting literature reviews. Includes overview of Institutional Review Board (IRB) policy and procedures. This course as the first (of six) of the series is intent on learning how to design research.
Prerequisites: ED F601, ED F603, or similar graduate level introductory research course.
Lecture + Lab + Other: 2 + 0 + 0
ED F638 Designing Social Science Research in Depth
2 Credits
Offered As Demand Warrants
In depth learning of quantitative and/or qualitative within social science research. Investigations into constructing and analyzing research designs and data collection methods for social science research. Introductions to the software applications of Atlas.ti for qualitative analysis and SPSS for quantitative analysis. This course as the second of the series is intent on completing students’ research design by looking ahead to data collection and refining all of the essential pieces such as problem statement, research questions, methodology and methods.
Prerequisites: ED F637.
Lecture + Lab + Other: 2 + 0 + 0

ED F640 Gender and Education
3 Credits
Educational practices and processes and their relation to the changing situation of women in society. Examination of schools as sites of pervasive gender socialization and discrimination as well as offering new possibilities for liberation. Topics include social construction of gender, patterns of access and achievements, gender as an organizing principle in schools and classrooms, and feminist agendas and strategies for change.
Stacked with ED F440; WGS F440.
Lecture + Lab + Other: 3 + 0 + 0

ED F647 Conducting Social Science Research Overview
2 Credits
Offered As Demand Warrants
Data collection techniques for quantitative and/or qualitative methods. Investigations into collecting and synthesizing quantitative and/or qualitative data for use in social science research. Includes software applications of Atlas.ti for qualitative analysis and SPSS for quantitative analysis. This course as the third of six of the series moves to actual data collection techniques connected to students' social science research. Topics included are often not covered in many other courses such as how to create tools to gather the necessary data. Alignment with the methodology, research questions and design are built in through the series as the work here continues to build upon the courses prior.
Prerequisites: ED F638.
Lecture + Lab + Other: 2 + 0 + 0

ED F648 Conducting Social Science Research in Depth
2 Credits
Offered As Demand Warrants
In depth investigations into collecting and synthesizing quantitative and qualitative data for use in mixed methods research. Includes software applications of Atlas.ti for qualitative analysis and SPSS for quantitative analysis. This course as the fourth of six of the series is intent on completing the data collection by investigating psychometrics, looking ahead to data analysis and looking back for consistency with the methodology, research questions and research design.
Prerequisites: ED F647.
Lecture + Lab + Other: 2 + 0 + 0

ED F649 Elementary Art Methods
3 Credits
Offered Spring
Methodologies of instruction and assessment in art education at the elementary level. Focus is on the knowledge and tools necessary to become excellent elementary art educators. Students will be expected to construct lessons reflecting theory and practice that are developmentally appropriate for elementary level students of all ages. Particular attention will be given to using and understanding the National Standards for Art Education, Alaska Content/Performance Standards and key curriculum documents in an elementary context.
Prerequisites: Admission to K-12 Art post-baccalaureate licensure program or M.
Stacked with ED F449.
Lecture + Lab + Other: 3 + 0 + 0

ED F650 Current Topics in Educational Technology: Innovative Instruction and Leadership
3 Credits
Offered Fall As Demand Warrants
This is a content-customized course for students interested in increasing their awareness of the impact of innovative technology in the learning environment. Participants in the class study professional and personal technology based topics relevant to various career fields in education, with an emphasis on current events, emerging technologies and ethical considerations. Readings, research papers and discussions lead to the development of an instructionally oriented technology proposal that includes an implementation plan and formal presentation.
Lecture + Lab + Other: 3 + 0 + 0

ED F651 Analyzing Social Science Research
2 Credits
Offered As Demand Warrants
Data analysis techniques for social science research. Investigations into qualitative coding and analysis and/or review of statistical analysis both univariate and multivariate within the context of social science research. Includes use of SPSS and Atlas.ti. This course as the fifth of six of the series moves to actual data analysis techniques for social science research. Topics included are specialized to support the research design, methodology and data collection efforts of the peer group.
Prerequisites: ED F648.
Lecture + Lab + Other: 2 + 0 + 0

ED F652 Presenting Social Science Research Results
2 Credits
Offered As Demand Warrants
Data presentation techniques for social science research. Investigations into presenting qualitative and/or statistical analysis results within the context of social science research. Includes use of SPSS and Atlas.ti. This course as the sixth and final of the series concludes the process with a focus on data presentation from a holistic perspective. Topics included are specialized to support the research design, methodology and data collection efforts of the peer group.
Prerequisites: ED F651.
Lecture + Lab + Other: 2 + 0 + 0
ED F653  Instructional Design
3 Credits
Offered Spring As Demand Warrants
Instructional design combines technology skills with application of learning theory to maximize the effectiveness of education. This course explores instructional design from a practical perspective. Students will acquire hands-on practice with a variety of computer-based tools while exploring instructional methods and principles of design.
Prerequisite: Admission to the Master of Education program.
Lecture + Lab + Other: 3 + 0 + 0

ED F654  Digital Citizenship, Internet Legal Issues, Digital Copyright and Fair Use
3 Credits
Offered Fall As Demand Warrants
An examination of critical elements of digital citizenship, a survey of contemporary legal issues, and an exploration of copyright, fair use, and intellectual property relevant to educators and instructional designers. Also available through E-Learning & Distance Education.
Prerequisites: Admission to the Master of Education program.
Lecture + Lab + Other: 3 + 0 + 0

ED F655  Online Pedagogy
3 Credits
Offered Fall As Demand Warrants
A study of theory, tools and methods for teaching online courses. Topics include prominent learning theories, affordance of new technologies, strategies for assessment and techniques for classroom management in an online environment. Students will develop and articulate a personal philosophy of teaching and learning appropriate for the 21st Century.
Prerequisite: Admission to the Master of Education program.
Lecture + Lab + Other: 3 + 0 + 0

ED F659  Multimedia Tools for Educators
3 Credits
Offered Fall
Emerging technologies and software applications in education. The use of multimedia in designing teaching/learning experiences will be emphasized. Students will develop a multimedia classroom presentation and will demonstrate knowledge of Internet resources.
Lecture + Lab + Other: 1 + 6 + 0

ED F660  Educational Administration in Cultural Perspective
3 Credits
Offered As Demand Warrants
Issues related to the social organization and socio-political context of schools, administrative and institutional change processes and the changing role of administrators in education, using a cross-cultural framework for analysis.
Lecture + Lab + Other: 3 + 0 + 0

ED F669  Reading, Language and Culture
3 Credits
Offered Fall, As Demand Warrants
Introduction to the foundations of psycholinguistic and sociolinguistic theories as they relate to oral and written language acquisition and development. Focus on issues of language and literacy education practices in the Alaska context. Topics include bi-lingual and bi-literacy education, school and community languages and literacies, and culturally responsive pedagogy. Emphasis on teachers/students developing the skills and dispositions to become researchers of culture, language and literacy in their communities.
Lecture + Lab + Other: 3 + 0 + 0

ED F670  Developing Literacy: ECE-12
3 Credits
Offered Spring
Explores literacy from early childhood through grade 12. Includes an emphasis on developmental aspects of literacy, underlying social and cognitive processes, cultural influences, and the pedagogical implications for teachers. Considers the needs of English language learners with respect to reading/literacy.
Prerequisite: LING F602.
Lecture + Lab + Other: 3 + 0 + 0

ED F673  Literacy in the Content Area
3 Credits
Offered Fall
Students will develop knowledge of strategies that support literacy in the content areas. Emphasis is on the interrelated processes of thinking, writing, reading, listening and speaking of students across languages, modes, and genres. Technology as a tool to enhance disciplinary literacies is explored. The role of teacher as researcher is addressed.
Prerequisite: ED F670.
Lecture + Lab + Other: 3 + 0 + 0

ED F676  Supporting Learning in Diverse Systems
3 Credits
Offered Spring As Demand Warrants
Provides students with the skills necessary to support student learning in a variety of managed and unmanaged computing environments. Students will explore methods of local and remote support, perform tasks to ensure an optimal managed learning environment for students and teachers, and create documentation for student and teacher use. Finally, students will step through the entire process of taking an idea for improving their learning environment by evaluating, implementing and instructing use of a solution of their choice.
Prerequisites: Admission to the Master of Education program.
Lecture + Lab + Other: 3 + 0 + 0

ED F677  Digital Storytelling
3 Credits
Offered Spring As Demand Warrants
This course examines the principles of storytelling in general and digital storytelling in particular, paying close attention to the use of digital storytelling to inform, persuade and entertain across a variety of social and cultural institutions. Elements of digital storytelling will be investigated and used to create original digital stories in a variety of media.
Prerequisites: Admission to the Master of Education program.
Lecture + Lab + Other: 3 + 0 + 0

ED F678  Mathematics Methods and Curriculum Development
3 Credits
Offered Fall
Study and application in the classroom of best practices from research-based strategies for the teaching and learning of mathematical concepts, content and methods for students in elementary classrooms with diverse populations. Requires development and classroom implementation of mathematics unit. Concurrent internship required.
Prerequisites: Admission to the post-baccalaureate elementary licensure program; graduate standing.
Stacked with ED F478.
Lecture + Lab + Other: 2 + 0 + 8
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Offered</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ED F681</td>
<td>Place-based Education</td>
<td>3</td>
<td>Offered Spring</td>
<td>An examination of the relationship between local landscape and community and the development of human perception. Emphasis on the importance of the development of ecologically appropriate community-based educational programs in rural and urban schools. Priority placed on project-centered programs lending themselves to experimental learning opportunities. Includes literature review, discussion, curriculum exploration and design and on-site community exploration of active place-based educational programs.</td>
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<td>Lecture + Lab + Other:</td>
<td>3 + 0 + 0</td>
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<tr>
<td>ED F682</td>
<td>Rethinking Multicultural Education</td>
<td>3</td>
<td>Offered Fall Odd-numbered Years</td>
<td>This multi-disciplinary course focuses on two parts: Critically analyze and reflect on current multicultural education issues at the national, state and local level and translate/apply what is learned to individual classrooms, schools, school districts and beyond. Topics include children of immigrants, Alaska Native education, culturally relevant education, social justice education and exploring ways to create stronger family-community-school partnerships. Fieldwork is required.</td>
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<td>Prerequisite:</td>
<td>Graduate standing.</td>
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<td>Lecture + Lab + Other:</td>
<td>3 + 0 + 1</td>
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<tr>
<td>ED F683</td>
<td>Instruction and Assessment in Literacy</td>
<td>3</td>
<td>Offered Spring</td>
<td>Examines standardized language and literacy assessments and how they are used in schools, with emphasis on the needs of English Language Learners. Formal and informal assessments are discussed and evaluated. The links between assessment and instruction and the implications for teachers, families, and communities are addressed. Students will apply course content in conducting teacher action research.</td>
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<td>Prerequisite:</td>
<td>ED F673.</td>
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<td>Lecture + Lab + Other:</td>
<td>3 + 0 + 0</td>
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<tr>
<td>ED F686</td>
<td>Assessment and Testing in K-12 Public Schools</td>
<td>3</td>
<td>Offered Spring</td>
<td>A foundational knowledge of assessment in K-12 public schools, includes interpretation and analysis of multiple and varied assessments. Common national and international assessment is examined. Assessment design practice connects standards, goals and learning experiences with varied assessment to document student learning and support curricular decisions. Fieldwork is required.</td>
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<td>Lecture + Lab + Other:</td>
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<tr>
<td>ED F687</td>
<td>Alaska: Resources, People and Perspectives (a)</td>
<td>3</td>
<td>Offered Spring</td>
<td>Introduces a broad range of essential Alaska information for educators including information on history, geography, literature, economics and politics.</td>
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<tr>
<td>ED F688</td>
<td>Science Methods and Curriculum Development</td>
<td>3</td>
<td>Offered Spring</td>
<td>Study and application in the classroom of the best practices from research-based strategies for the teaching and learning of science concepts, content and methods for students in elementary classrooms with diverse populations. Requires development and classroom implementation of science unit. Classroom internship required.</td>
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<td>Prerequisites:</td>
<td>Admission to the post-baccalaureate elementary licensure program; graduate standing.</td>
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<tr>
<td>ED F689</td>
<td>Proseminar in Applied Educational Research</td>
<td>3</td>
<td>Offered As Demand Warrants</td>
<td>Application of social science and educational research methods to the description and analysis of the student's research topic. The research topic chosen will be the substance of each student's literature review and synthesizing paper. Conceptually integrated with ED F698 (to be taken a subsequent semester), where the final master's project is completed. Completion and approval of the synthesizing paper, by the committee, is required for successful completion of this course. Note: Acceptance into an M.Ed. degree program; completion of all required core courses; at least nine credits in the area of concentration.</td>
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<tr>
<td>ED F690</td>
<td>Seminar in Cross-cultural Studies</td>
<td>3</td>
<td>Offered As Demand Warrants</td>
<td>Investigation of current issues in cross-cultural contexts. Opportunity for students to synthesize prior graduate studies and research. Seminar is taken near the terminus of a graduate program.</td>
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<td>Prerequisites:</td>
<td>Advancement to candidacy; permission of student's graduate committee.</td>
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<td>CCS F690; ANL F690; RD F690.</td>
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<td>Lecture + Lab + Other:</td>
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<tr>
<td>ED F691</td>
<td>Contemporary Issues in Education</td>
<td>3</td>
<td>Offered As Demand Warrants</td>
<td>A critical overview of the current status of the field of education. Students will participate in a thorough investigation of select problems, trends and issues that presently characterize the institution of public education. Seminar sessions will focus on student research regarding the development, present impact and potential implications of each topic discussed.</td>
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<td>ED F692</td>
<td>Seminar</td>
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<td>ED F699</td>
<td>Thesis</td>
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Graduate standing.